

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listings of the Claims:**

Please amend the subject application as follows:

1-155. (Canceled)

156-158. (Canceled)

159. (Canceled)

160-183. (Canceled)

184. (New) An isolated nucleic acid encoding a chimeric G protein, wherein the chimeric G protein comprises an *Caenorhabditis elegans* Gαq G protein from which five contiguous amino acids beginning with the C-terminal amino acid have been deleted and replaced by five contiguous amino acids present in a human G protein beginning with the C-terminal amino acid of such human G protein; provided that upon activation the chimeric G protein produces a Gαq second messenger response and wherein the Gαq second messenger response comprises release of intracellular calcium or calcium mobilization.

185. (New) The nucleic acid of claim 184, wherein the human G protein is a human Gαz G protein or a human Gαi3 G protein.

186. (New) The nucleic acid of claim 184, wherein the chimeric G protein has the amino acid sequence of SEQ ID NO: 1 or SEQ ID NO: 5.
187. (New) An isolated nucleic acid encoding a chimeric G protein, wherein the chimeric G protein comprises an *Caenorhabditis elegans* Gαq G protein from which nine contiguous amino acids beginning with the C-terminal amino acid have been deleted and replaced by nine contiguous amino acids present in a human G protein beginning with the C-terminal amino acid of such human G protein; provided that upon activation the chimeric G protein produces a Gαq second messenger response and wherein the Gαq second messenger response comprises release of intracellular calcium or calcium mobilization.
188. (New) The nucleic acid of claim 187, wherein the human G protein is a human Gαz G protein or a human Gαs G protein.
189. (New) The nucleic acid of claim 187, wherein the chimeric G protein has the amino acid sequence of SEQ ID NO: 2 or SEQ ID NO: 3.
190. (New) An isolated nucleic acid encoding a chimeric G protein, wherein the chimeric G protein has the amino acid sequence of SEQ ID NO: 4 or SEQ ID NO: 41.